

PLANK FLOORS

as *crafted*

by *Bruce*

Hardwood floors have that quality of firmness—without harsh rigidity—which reduces the fatigue of standing or walking. Whenever wood floors were used in olden times, the plank style prevailed.



Historic Floors for the New Environment

BENTURIES ago in the "hand craft" era, when furniture and wood work of a home were the product of individual craftsmen, rough effects and interesting irregularities were not intentional, but the inevitable consequence of such hand-work. Wood floors especially displayed the "casual" effects characteristic of the time. Solid oak planks, of necessity rough hewn, of ranging widths and lengths, determined by the size of available logs and the dimensions of the room, were traditional in the architecture of Renaissance Italy, France and Spain, Elizabethan England and Colonial America. These oak floors are still sound, mellowed and enriched by age.

Today, solid floor planks as *crafted* by Bruce, bring this historic flooring into the modern environment. They conform to decorative requirements as to nicety of workmanship, but retain the "accidental" flavor which contributed much to the charm

■ Wearing quality, ease of upkeep, with style and beauty, are attributes sought for in floors which will receive more than residential usage . . . Oak planks in the parlor of the new San Carlos Hotel, New York, will give unlimited service.



of the original floors. Random widths and lengths are now deliberately planned, and the floor may be laid out in any one of several authentic styles, to suit the taste of the owner. Varying widths the full length of the room; or varying widths and lengths combined; or for the more formal interior, equal widths. Beveled edges suggest the "cracks" ever present in early floors, which were certainly undesirable as cracks, but are of great decorative value, as defining individual boards, and emphasizing the random widths. Knots and unevenness of grain and color are more evident in oak planks of the so-called "lower grades," which differ from the higher grades only in such characteristics, not to any degree in strength or wearing qualities.





■ Bruce *CELLized oak planks, laid random widths and lengths, the short way of the room, support the richness and dignity of the wood paneling in the directors' room of the Sterling Lumber & Supply Co., Chicago.

In the lower illustration we have planks for walls and ceiling, with maple and walnut *CELLized blocks for the floor in one of the offices of the E. L. Bruce Company.

Planks for walls and ceiling may be sanded on the floor immediately before use, or may be obtained factory-sanded, ready for installation.

LIBERAL use of wood in the decoration of offices, directors rooms and similar interiors is increasing in favor with architects and owners, because of the character and warmth peculiar to wood, and the ease of maintenance. There is scarcely any limit to the variety that may be secured through judicious use of planks, laid in different styles, for floors, walls and ceilings, or in combination with *CELLized wood floor blocks in various woods and sizes.

Architects are invited to inspect the outstanding display of hardwood floor, wall and ceiling treatment of both planks and blocks in the executive offices of the E. L. Bruce Co. at Memphis.





BRUCE solid oak planks have character, expressed not only in the faithfulness with which old-time characteristics are retained, but in the refinements demanded by the present trend in decoration. Manufactured with the greatest care in modern plants, and by machinery especially designed for the purpose, the finished product is evidence of skilled craftsmanship in every detail.

Accurately kiln-dried lumber is machined into boards with tight fitting tongues and grooves on both sides and ends. To produce the V-joint, edges are beveled. And finally Bruce planks may be obtained *CELLized, a chemical treat which increases resistance to the movement of moisture in and out of the wood, and thus assures greater stability in size.

Mansion oak planks, square edge, laid random widths and lengths, in a San Jose, California, home. Warren Skillings, architect. The variation in the plank widths is brought out by grain and coloration, rather than by beveled edges.



MANSION
(1)



FIRESIDE
(2)



TAVERN
(3)



(See grading rules, page 15)

THREE clearly defined grades of oak planks, with five widths in each grade, afford both architect and owner ample scope within which to fashion the exact floor effect desired. The Mansion grade is free of knots, stains, dark streaks, and checks. The Fireside grade permits a limited amount of these so-called "defects," while the Tavern grade has an abundance of them. These "defects" in no way affect durability, and their finished appearance is often considered most interesting and beautiful. Indeed, the Mansion grade is too perfect in appearance to accurately portray the effect of old-time oak boards.

Bruce solid planks may be had also in American walnut and Philippine mahogany, to conform to a desired decorative scheme.

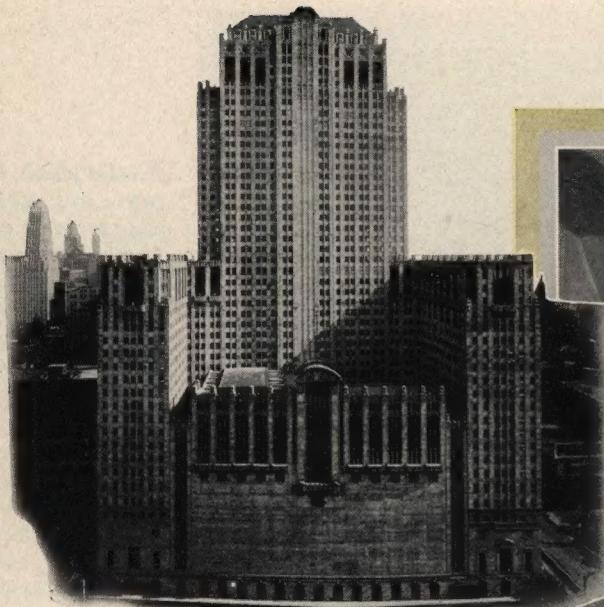


Solid planks because of their wide surfaces, emphasize the natural pictorial beauty of hardwood, making the floor a distinct element in decoration.

MANY homes are now being remodeled. No element is more important than the floor, and Bruce planks will introduce into the remodeled home an atmosphere of dignity and beauty that lends charm to all other interior decorations. They may be easily and economically installed over the old worn floors.

Random width plank floors were not originated in the far past as a matter of architectural design, or even of good taste. They existed because of necessity and economy. After boards were split or sawed from the logs they were too valuable to waste because of lack of uniformity. Having the essential elements of strength and service they were used. Unconsciously our forefathers gave us what we now value for beauty and charm.





■ *The Electric Club occupies the 39th floor of the beautiful Civic Opera Building, 20 North Wacker Drive, Chicago.*

To look at these interiors, we could easily imagine that we have a typical country club, surrounded by lawns, trees and shrubbery, and that we could step from its broad portals onto our favorite links. The floor of Bruce oak planks, and the wood treatment of columns, walls, and ceiling beams at once suggest such a structure.

Yet the Electric Club finds commodious quarters on the 39th floor of one of our most modern city buildings. It is an outstanding advantage of plank floor treatment that "hominess," together with richness and quiet dignity, may be obtained under such unusual conditions.



■ *Bruce oak planks, in random widths, beveled edge, are especially appropriate to an atmosphere of spaciousness, without monotony. In these photographs of the parlors (at the right) we see how plank flooring is in harmony with two of page 10 is shown an oak plank ceiling in one of the lounge rooms of t*



provides for a wide floor expanse, contributing
of the main dining room, and of one of the
different types of wall treatment. At the bottom
is the Electric Club.



■ Simplicity and unity are emphasized
by wide oak planks extending back
through adjoining dining rooms.



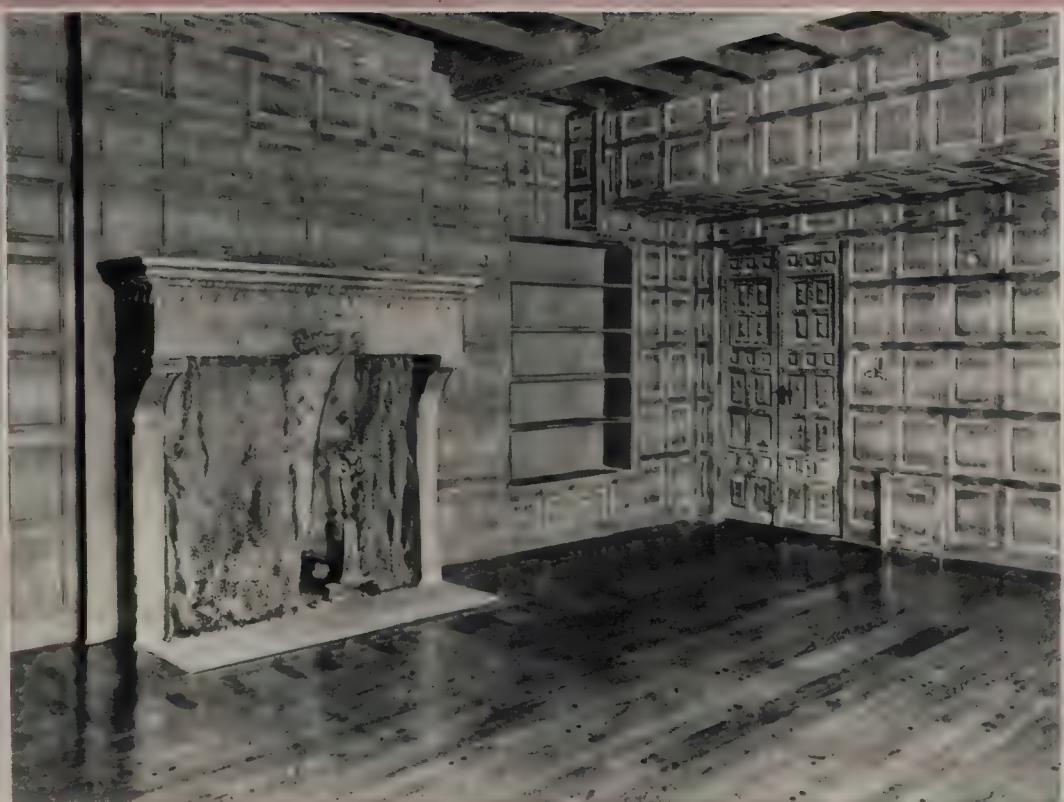
■ An interesting example of the use of Tavern grade *CELLIZED oak planks for the floor, and for walls, carried up to a frieze decoration. Wall planks may extend to the ceiling, or to a wainscoting. Residence of R. E. Hill, Kansas City, Missouri.



P LANK flooring combines all elements of the practical with opportunities for variety, and the rapidly expanding use of planks for walls and ceilings, is another adaptation historically correct. The idea of planking walls and ceilings is not new, as we find many illustrations of it in early European homes. Custom runs in cycles. The oldest of the old castles of England, France and Germany had walls lined with random-width boards. Floors and ceilings were of the same material, rough because of hand sawing and hewing. Then as tools were improved, more ornate wood panels in regular designs predominated. And today the cycle completes itself, in the tendency to harken back to earliest historical wall and ceiling treatment in the use of random-width oak planks.

There is a sense of warmth and intimacy about oak. Wood floors, walls, and ceilings not only seem warmer; they actually are. Oak is the sovereign wood, and when it dominates the plan, it produces the unity so essential to any artistic setting, charming all those who come under the spell of the "all-wood" room.





■ This unfinished library in the home of John Barrymore, Beverly Hills, California, illustrates the harmony obtained through the use of Mansion grade oak planks with oak wall paneling and ceiling beams. The absence of the beveled edge makes the random width effect barely distinguishable.



■ Solid oak floor planks are extensively used in Colonial and English type homes, where plain interior decoration calls for the correct floor.

■ Dark finished random width Bruce oak planks, beveled edges, Mansion grade, in a Spanish type residence, Piedmont, California. Builder, owner, and architect, Edwin Snyder, San Francisco.



■ A new and very interesting plank floor treatment in the recreation room of a Los Angeles residence. *CELL-sized oak floor planks, cut to length, are laid diagonally in EVERBOND, a plastic cement, over waterproof membranized concrete.





WITH the installation of solid oak planks extremely simple and inexpensive, and with warmth, natural beauty, strength and adaptability so pronounced, it is no wonder that so many widely contrasted types of homes are now floored with planks. The plank type floor bears the "certification of centuries of service." Wood is genuine and real, the best material friend of mankind. Wood is imitated, but never imitates. Wood is imitated, but is imitable. Man cannot duplicate Nature's most valuable gift.



■ *A few of the many fine homes throughout the United States floored with Bruce oak planks.*

Mansion grade
Bruce *CELLized oak planks, random widths and lengths in the outer office of Joseph Brothers Lumber Co., Chicago. Tavern grade in the inner office. Note the 6 inch plank, with tongue up, as baseboard. The floor is *CELLized oak, basket-weave design, combining rectangles and 6 inch square blocks.



Application Instructions for Bruce Floor Planks

*These instructions apply uniformly for both *CELLized and untreated Bruce Planks*

BRUCE *CELLized Floor Planks are treated with a chemical process which will reduce, but which we do not guarantee to eliminate, expansion and shrinkage. It improves the Planks by minimizing the possibility of distortion. However, the nature of this product is such that perfection is sometimes not effected, especially if correct application is not followed and if proper laying conditions do not exist.

We recommend the use of *CELLized Planks as an improved product having protective value much in excess of the additional cost.

These instructions *must* be followed to obtain the most satisfactory results.

AVOID THESE HAZARDS

New construction is necessarily damp, necessitating a substantial period of drying with artificial heat and air circulation before floor application. Closed and unoccupied buildings retain humidity which is absorbed by floors and they, therefore, require at least periodic drying and airing.

Building construction permitting abnormal humidity is hazardous, i.e., damp wooden sub-floors, and joists; also damp basements or areas between the floor and the earth not generously ventilated.

Unless conditions are ideal Planks should not be laid over concrete. Concrete in all cases must be membrane waterproofed and have a substantial period of drying with *artificial heat*.

Such conditions as above mentioned may cause some expansion and, vice versa, artificial heat, after Planks are laid, such as radiators, fire-places, hot water or hot air pipes will from use during the prolonged winter season cause some shrinkage. The use of proper humidifiers is recommended to correct this.

However, expansion and shrinkage are usually seasonal conditions and will continue in a diminishing degree for one or more seasons, until the wood is fatigued, after which it will remain in an inert condition.

Sub-Floor: A hardwood floor is no better than its foundation. A sub-floor is necessary and should be of kiln-dried stock not wider than six (6) inches (preferably four [4] inches), laid diagonally on joists spaced 16 inches from center to center, with each board faced-nailed *liberally* to every joist. Sub-floor must be dry at time of top-floor application as any shrinkage will affect the top-floor.

Application for Floors: Much greater precaution is necessary in laying Planks than is required for narrow face flooring. Fundamentally the more nails and screws used, the more satisfactory will be the floor. Planks must be blind nailed through the tongue with 8d cut or cement coated casing nails at least every 12 inches. However, 8-inch spacing is preferred as this allows every second nail to enter a joist.

In addition, they must be securely fastened through the face with screws or nails (cut or cement coated) in the following manner:

Locate joists or screeds and mark plainly so that screws or nails may be placed to securely enter them. Merely fastening to the sub-floor is not sufficient. Stagger screws or nails and use in number according to the following formula:

4 and 5" Planks 1 every 32" in length. Also 1 at each end.

6 and 7" Planks 2 every 32" in length. Also 2 at each end.

8" Planks 3 every 32" in length. Also 3 at each end.

If nails are used a wood cement may be used to hide the indenture. If screws are used cover with our Walnut plugs $\frac{3}{4}$ " in diameter and $\frac{1}{4}$ " long, using waterproof glue. For face fastening, nails or screws should average about one for each square foot of floor space. Plugs, the same number.

In humid climates, we suggest placing a scraper blade between the strips at points of nailing as floor is applied. This provides some area for later expansion. Substantial expansion areas must be provided under baseboard and shoe, and around columns, hearths, under thresholds, etc.

Scraping and Sanding: The surface discoloration of the treated wood will disappear with complete scraping and sanding. Filling should follow promptly.

Filling and Staining: Only strictly oil fillers and stains must be used. *CELLIZED Flooring, due to its moisture-resisting qualities, will not accept preparations containing water.

Finishing: We advise two or more coats of shellac, followed with two or more applications of paste wax. However, varnish may be used, providing it is applied over one or two coats of shellac, preferably two. Due to the non-absorbing qualities of the treated wood varnish must not be applied except over shellac. Other finishing methods may prove satisfactory; however, it will be advisable to inquire of the manufacturer before trying them.

APPLICATION FOR WALLS AND CEILINGS

In the installation of planks on walls or ceiling the "sub-floor" is omitted, and the planks must be secured only to studding or screeds.

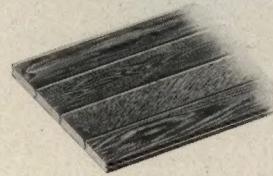
*BRUCE Oak Planks
are sold through
retail lumber dealers
everywhere.*

E. L. Bruce Co.
MEMPHIS TENNESSEE

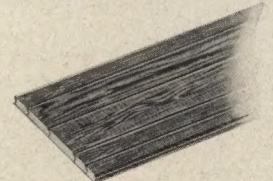
LARGEST MAKERS OF HARDWOOD FLOORING IN THE WORLD

It is necessary to use well anchored $3\frac{1}{2}$ " screeds or groundstrips spaced 16" on center, to which planks are nailed and screwed in accordance with the formula given above for floor application.

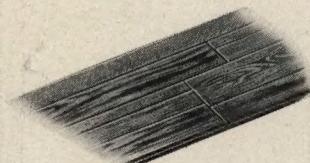
On the walls, instead of the customary baseboard, use 6" plank with the tongue up, to take care of the groove end-match of the vertical planks.



Bruce solid floor
planks laid in equal
widths the full
length of the room.



As in the illustration at left,
random widths full length,
suggest the "accidental"
handling of early plank floors.



Not only varying widths,
but random lengths, will
still further emphasize the
"casual" in floor treatment.

Bruce hardwood planks are furnished with beveled edge, *CELLIZED or untreated, or with square edge, *CELLIZED or untreated. Wide widths are susceptible of some movement and change in size and for this reason we strongly recommend the use of beveled edge treated stock. *CELLIZING reduces the tendency to shrink and expand and the V joint serves the purpose of both minimizing this tendency as well as emphasizing the random width effect which is necessary for real artistic appearance. We definitely caution against the plain square edge joint.

We assume no responsibility on Floor Planks for failure in any manner such as cupping, buckling, shrinking, etc.

GRADING RULES

Plain and Quartered Oak Planks

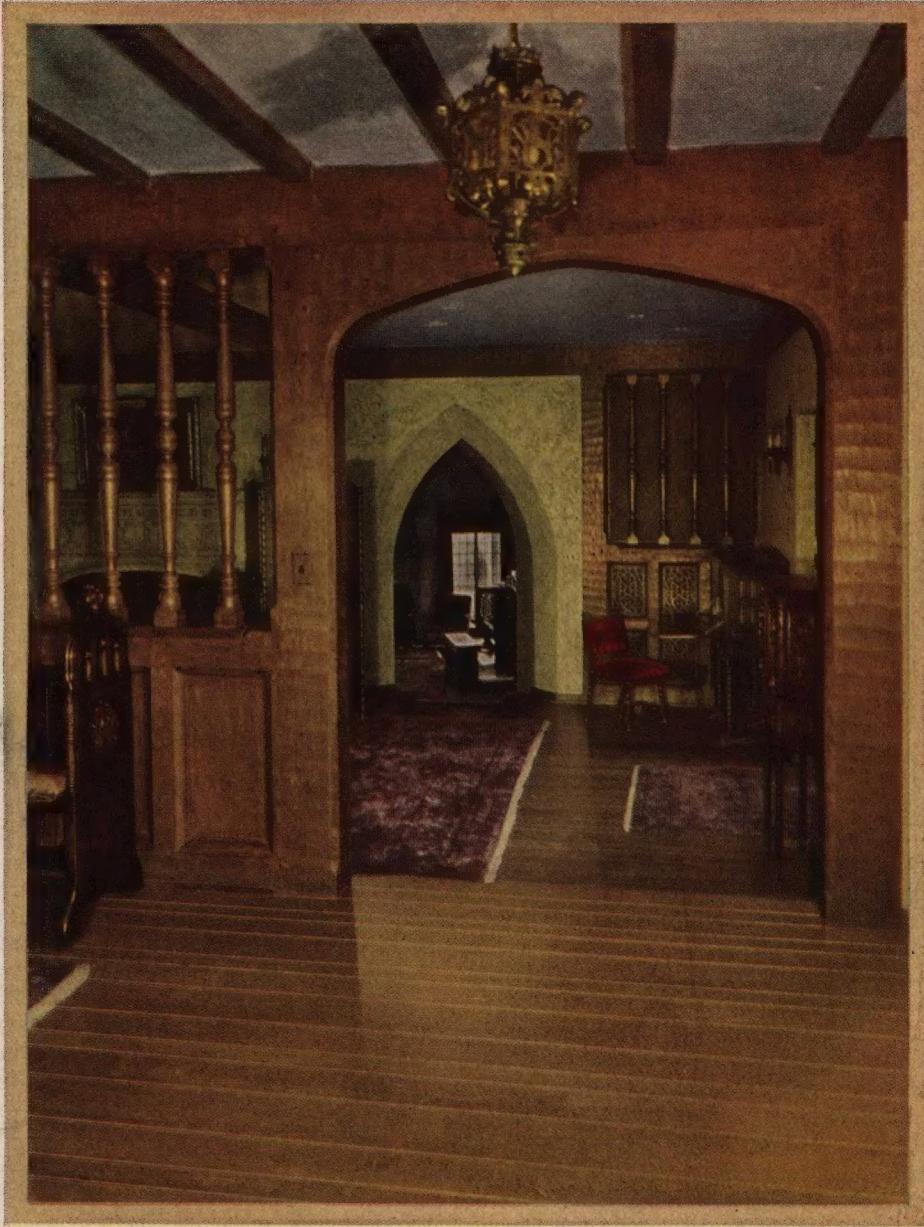
Mansion—Shall have one face practically free of defects except 20% of bright sap in any piece may be admitted; the question of color shall not be considered.

Fireside—May contain sap, and will admit pin worm holes, streaks, slight imperfections in working, or a small tight knot, not to exceed one to every 3' in length.

Tavern—Shall be of such nature as will make and lay a sound floor but purposely containing defects that will be noticeable.

Lengths all grades 2' and longer.





Character in **BRUCE** **PLANK FLOORS-**

Our friendship with wood is never broken. Mankind has grown through the centuries with wood, and nothing can take its place. Years of growth are necessary to produce its inimitable beauty in grain and coloring, and the appreciative eye never tires of the enduring picture Nature creates. Real worth, solidity, beauty that is more than surface deep, dependability based on a past rich in tradition . . . these qualities express character in floors, as in people.

Digitized by:



ASSOCIATION
FOR
PRESERVATION
TECHNOLOGY,
INTERNATIONAL

www.apti.org

BUILDING
TECHNOLOGY
HERITAGE
LIBRARY

<https://archive.org/details/buildingtechnologyheritagelibrary>

From the collection of:

NATIONAL
BUILDING
ARTS
CENTER

<http://web.nationalbuildingarts.org>